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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/863,405	05/24/2001	Khanh Phi Van Doan	169.2061	9187

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FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER	
WANG, JIN CHENG	

ART UNIT	PAPER NUMBER
2628	

DATE MAILED: 08/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/863,405	VAN DOAN ET AL.	
	Examiner	Art Unit	
	Jin-Cheng Wang	2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 June 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10,20-25,31,33-37,40,42-50,65-72,78,97-107,114 and 116* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10,20-25,31,33-37,40,42-50,65-72,78,97-107,114 and 116* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

Applicant's submission filed on 6/19/2006 has been entered. Claims 1, 20, 31, 33, 65, 78, 97, 114 and 116 have been amended. Claims 11-19, 26-30, 32, 38-39, 41, 51-64, 73-77, 79-96, 108-113, and 115 have been canceled. Claims 1-10, 20-25, 31, 33-37, 40, 42-50, 65-72, 78, 97-107, 114 and 116 are pending in the application.

Response to Arguments

Applicant's arguments, see pages 25-26, filed 6/19/2006, with respect to Tlaskal U.S. Patent No. 6,795,587 have been fully considered and are persuasive. The 102(e) rejection of claims has been withdrawn.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-10, 31, 33-37, 40, 42-50, 78, 97-107, and 116 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-10:

At line 1 of the claim, it recites "a computer implemented method." A computer implemented program having the steps as claimed in the method set forth in the claim 1 encompasses the same scope of invention set forth in the claim 1. A computer implemented

program per se do not execute instructions or perform a method. Applicant should consider amending the claim 1 at line 1 to claim "a method".

The claims 2-10 depend upon the claim 1 and are rejected due to their dependency on the claim 1.

Claims 33-37, 40 and 42-50:

The claim 33 is subject to the same rationale of rejection set forth in the claim 1.

The claims 34-37, 40, 42-50 depend upon the claim 33 and are rejected due to their dependency on the claim 33.

Claims 97-107:

The claim 97 is subject to the same rationale of rejection set forth in the claim 1.

The claims 98-107 depend upon the claim 97 and are rejected due to their dependency on the claim 97.

Claim 31:

At line 2 of the claim, it recites "software code portions for performing a method". Software code portions per se do not execute code instructions or perform a method, they cause a processor to perform the method by executing the code instructions. Applicant should consider amending claim 31 at line 2 to claim "computer-executable instructions causing the processor to perform a method".

Claim 78:

At line 2 of the claim, it recites "software code portions for performing a method". Software code portions per se do not execute code instructions or perform a method, they cause a processor to perform the method by executing the code instructions. Applicant should consider amending claim 78 at line 2 to claim "computer-executable instructions causing the processor to perform a method".

Claim 116:

At lines 2-3 of the claim, it recites "software code portions for performing a method". Software code portions per se do not execute code instructions or perform a method, they cause a processor to perform the method by executing the code instructions. Applicant should consider amending claim 116 at lines 2-3 to claim "computer-executable instructions causing the processor to perform a method".

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 31, 78 and 116 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. This application is directed to a useful, concrete, and tangible result, however, these claims are directed to computer-readable medium encoded with a computer program for a computer comprising software code portions for performing a method

however these claims do not have a computer actually execute the instructions set forth in the computer program. The claimed computer readable medium has not been claimed to be employed as a computer component. Currently the claims are directed to a computer program which may be on paper that is readable by a computer via a scanner which computer program is for performing the claimed method. These claims need to be amended to claim "A computer-readable medium encoded with computer-executable instructions causing a computer to perform a method" or in a similar way to ensure the computer-readable medium is being employed as a computer component.

Claims 1-10, 33-37, 40, 42-50, and 97-107 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. At line 1 of the claim 1, it recites "a computer implemented method." A computer implemented program having the steps as claimed in the method set forth in the claim 1 encompasses the same scope of invention set forth in the claim 1. A computer implemented program *per se* do not execute instructions or perform a method. Applicant should consider amending the claim 1 at line 1 to claim "a method". The claims 2-10 depend upon the claim 1 and are rejected due to their dependency on the claim 1.

The claim 33 is subject to the same rationale of rejection set forth in the claim 1.

The claims 34-37, 40, 42-50 depend upon the claim 33 and are rejected due to their dependency on the claim 33.

The claim 97 is subject to the same rationale of rejection set forth in the claim 1.

The claims 98-107 depend upon the claim 97 and are rejected due to their dependency on the claim 97.

Supporting excerpts from MPEP 2106 follows.

1. Nonstatutory Subject Matter

Claims to computer-related inventions that are clearly nonstatutory fall into the same general categories as nonstatutory claims in other arts, namely natural phenomena such as magnetism, and abstract ideas or laws of nature which constitute "descriptive material." Abstract idea, *Warmerdam, 33 F.3d at 1360, 31 USPQ2d at 1759*, or the mere manipulation of abstract ideas, *Schrader, 22 F.3d at 292-93, 30 USPQ2d at 1457-58*, are not patentable. Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangements of data.

Both types of "descriptive material" are nonstatutory when claimed as descriptive material *per se*. *Warmerdam, 33 F.3d at 1360, 31 USPQ2d at 1759*. When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035* (Fed. Cir. 1994) (claim to data structure stored on a computer readable

medium that increases computer efficiency held statutory) and *Warmerdam, 33 F.3d at 1360-61, 31 USPQ2d at 1759* (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760* (claim to a data structure per se held non-statutory). When nonfunctional descriptive material is recorded on some computer-readable medium, it is not statutory since no requisite functionality is present to satisfy the practical application requirement. Merely claiming nonfunctional descriptive material stored in a computer-readable medium does not make is statutory. Such a result would exalt from over substance. *In re Sarkar, 588 F.2d 1330, 1333, 200 USPQ 132, 137 (CCPA 1978)* ("(E)ach invention must be evaluated as claimed; yet semantogenic considerations preclude a determination based solely on words appearing in the claims. In the final analysis under 101 <appxl 35 U.S.C. 101.htm \usc35s101>, the claimed invention, as a whole, must be evaluated for what it is.") (quoted with approval in Abele, 684 F.2d at 907, 214 USPQ at 687). See also *In re Johnson, 589 F.2d 1070, 1077, 200 USPQ 199, 206* (CCPA 1978) ("form of the claim is often an exercise in drafting"). Thus, nonstatutory music is not a computer component and it does not become statutory by merely recording it on a compact disk. Protection for this type of work is provided under the copyright law.

2. Functional Descriptive Material: "Data Structures" Representing Descriptive Material Per Se or Computer Programs Representing Computer Listing *Per Se*

Computer programs are often recited as part of a claim. Office personnel should determine whether the computer program is being claimed as part of an otherwise statutory manufacture or

machine. In such a case, the claim remains statutory irrespective of the fact that a computer program is included in the claim. The same result occurs when a computer program is used in a computerized process where the computer executes the instructions set forth in the computer program. Only when the claimed invention taken as a whole is directed to a mere program listing, i.e., to only its description or expression, is it descriptive material per se and hence nonstatutory.

Since a computer program is merely a set of instructions capable of being executed by a computer, the computer program itself is not a process and Office personnel should treat a claim for a computer program, without the computer-readable medium needed to realize the computer program's functionality, as nonstatutory functional descriptive material. When a computer program is claimed in a process where the computer is executing the computer program's instructions, Office personnel should treat the claim as a process claim. See paragraph IV.B.2(b), below. When a computer program is recited in conjunction with a physical structure, such as a computer memory, Office personnel should treat the claim as a product claim. See paragraph IV.B.2(a), below.

Allowable Subject Matter

Claims 1-10, 31, 33-37, 40, 42-50, 78, 97-107 and 116 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, and 35 U.S.C. 101 set forth in this Office action.

The following is a statement of reasons for the indication of allowable subject matter:

Claims 1-10, 20-25, 31, 33-37, 40, 42-50, 65-72, 78, 97-107, 114 and 116:

The prior art of record fails to teach or suggest the opacity region representation and the obscurence region representation are associated with the same leaf node.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jin-Cheng Wang whose telephone number is (571) 272-7665. The examiner can normally be reached on 8:00 - 6:30 (Mon-Thu).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on (571) 272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

jcw

KEE M. TUNG
SUPERVISORY PATENT EXAMINER